Georgina Bengough, daughter of the English director of the Vienna gas-works. A visit in 1863 to Vesuvius was followed next year by the appearance of the "Geology of New Zealand" and of the "Palæontology of New Zealand," both of great scientific value, and forming his main contributions to the extensive series of the *Novara* publications.

About the same time Hochstetter was commissioned to explore the lacustrine basins in Carinthia and other parts of Austria, where he discovered numerous remains of kitchen-middens and prehistoric lake dwellings similar to those found in the lakes of Switzerland. In 1867 he was elected President of the Imperial Geographical Society of Vienna, a position which he held till compelled by his failing health to resign it in 1882. He now commenced the publication of a whole series of geological and mineralogical text-books for higher schools, which were introduced into many parts of the Austrian Empire, and one of which, on crystallography, was especially distinguished by its clearness and thorough grasp of the subject. Time was now also found to complete his geological essays on the Cape of Good Hope, the Island of St. Paul, the Nicobars, and Java, for the *Novara* series, and also to publish an interesting account of the great earthquake and sea-wave of 1868, in the southern hemisphere, including a calculation of the mean depth of the Pacific deduced from the known velocity of the waves across that ocean. The appointment of Consulting Geologist to the Turkish Great Railway Company brought him in 1869 to the Balkan Peninsula, the results of which journey soon after appeared, partly in the *Proceedings* of the Vienna Geographical Society, partly in the *Year-Book* of the Imperial Geological Institute, and in *Petermann's Mittheilungen*. For these important geological surveys he was decorated by the Sultan with the order of the Mejidié. Notwithstanding the loss of his eldest daughter Julia in 1871, and a chronic affection of the throat, his scientific writings and surveys were now continued with unflagging zeal, including a handbook of geology which formed part of the "Allgemeine Erdkunde"; an atlas of twenty-four geological pictorial views, with letterpress; much harassing work in connection with the Viennese International Exhibition of 1873; and lastly, an arduous journey of over two months in the summer of 1872 to the Urals and Siberia as consulting geologist to a large mining association. Then came his honourable appointment as teacher of science to Crown Prince Rudolph in 1872, followed in 1875 by his election to the Rectorship of the Technical University, and in 1876 to the position of Imperial Intendant (Chief Curator) of the Imperial Austrian Museum of Zoology, Ethnology, and Natural History. He had hoped to witness the completion of this magnificent building, which has been in progress for many years; but, although it was nearly ready for occupation as early as the summer of 1881, he did not live to see it opened to the public. In the interests of the Museum he visited Denmark, Holland, Belgium, and North Germany in 1876, and was soon after busily engaged superintending excavations in Carinthia, Bohemia, and other parts of the empire, which resulted in the discovery of rich palæontological and archæological treasures, prehistoric burial-places, skeletons of the extinct cave bear, remains of fossil man, a large number of bronze ornaments, weapons, and implements. Towards the end of 1879 his health began to decline. He suffered much about this time from pains in the legs and arms, accompanied by sleeplessness and other symptoms which later developed into an incurable attack of diabetes, terminating on July 21 last a laborious and blameless life devoted entirely to the advancement of the natural sciences. Indefatigable to the last, he found time in the midst of his multifarious labours to issue a report in 1883 on some Mexican antiquities discovered by him in the Ambrose Collection in Tyrol, and which had originally been sent by Fernando Cortez to the Emperor Charles the Fifth. His last contribution to science was a paper read in February of the present year before the Vienna Geological Institute, giving an instructive account of the celebrated mineralogical collection now removed to the New Imperial Museum. Hochstetter's life may thus be described as an epitome of the history of the natural sciences in Austria during the last quarter of a century. Dr. von Haast's appreciative memoir concludes with the appropriate lines from Goethe:—

> "Fest steh' dein Sarg in wohlgegönnter Ruh;
> Mit lockrer Erde deckt ihn leise zu,
> Und sanfter als des Lebens, liege dann
> Auf dir des Grabes Bürde, guter Mann!"

NOTES

PROF. G. H. DARWIN, of Cambridge, and Prof. Daniel Oliver, of the Royal Gardens, Kew, have been nominated by the Council of the Royal Society for the award of the two Royal Medals conferred by the Crown. The Copley Medal is to be given to Prof. Carl Ludwig, of Leipzig, in recognition of the great services which he has rendered to physiological science. Prof. Tobias Robertus Thalén, of Upsala, is to have the Rumford Medal for his spectroscopic researches; and the Davy Medal is awarded to Prof. A. W. H. Kolbe, also of Leipzig, for his researches in the isomerism of alcohols. The two Leipzig Professors are Foreign Members of the Society. Prof. Darwin and Prof. Oliver are Fellows, the former well known for his mathematical investigations on the rigidity of the earth and on tides, the latter for his investigation of the classification of plants and for the important services which he has rendered to taxonomic botany.

IN speaking recently at the Academy of Music in Philadelphia to a large audience on the wave-theory of light, Sir William Thomson made the following remarks on the employment of the metrical system:—"You, in this country, are subjected to the British insularity in weights and measures; you use the foot, and inch, and yard. I am obliged to use that system, but I apologise to you for doing so, because it is so inconvenient, and I hope all Americans will do everything in their power to introduce the French metrical system. I hope the evil action performed by an English Minister whose name I need not mention, because I do not wish to throw obloquy on any one, may be remedied. He abrogated a useful rule, which for a short time was followed, and which I hope will soon be again enjoined, that the French metrical system be taught in all our national schools. I do not know how it is in America. The school system seems to be very admirable, and I hope the teaching of the metrical system will not be let slip in the American schools any more than the use of the globes. I say this seriously. I do not think any one knows how seriously I speak of it. I look upon our English system as a wickedly brain-destroying piece of bondage under which we suffer. The reason why we continue to use it is the imaginary difficulty of making a change and nothing else; but I do not think in America that any such difficulty should stand in the way of adopting so splendidly useful a reform."

IT is stated that Lord Rayleigh has resigned the Cavendish Professorship of Experimental Physics. The electors are Sir W. Thomson, Sir William (Justice) Grove, Profs. Liveing, Stokes, Darwin, R. B. Clifton (Oxford), and Stuart, and Mr. W. D. Niven.

DR. THOMAS WRIGHT, F.R.S., of Cheltenham, died on the night of Monday last. This sad announcement will be received with much regret by all who take interest in the progress of geology and palæontology. We hope to give some account of the deceased naturalist next week.

THE presentation of prizes and certificates to the students of the Finsbury Technical College, and of the South London School of Technical Art, and also to the candidates at the Technological Examinations held this year in London will take place at the Fishmongers' Hall on the 4th proximo at 7.30 p.m. The Lord Mayor will preside, and the prizes will be presented by the Lord Chancellor.

NEWS from Japan states that Prof. Milne, of Tokio University, is about to establish a subterranean observatory at Jacashima, a very deep coal-mine not far from Nagasaki. The object of this observatory is to determine what connection exists between the earthquake phenomena and meteorological phenomena belonging to the earth's surface, such as storms, barometrical pressure, tides, tidal waves, &c.

M. HANSEN-BLANGSTED contributes to *L'Exploration* an interesting article on the struggle between trees in the Danish forests. The chief combatants are the beech and the birch, the former being everywhere successful in its invasions. The paper refers especially to the district of Silkeborg in the heart of Jutland. Forests composed wholly of birch are now only found in sterile sandy tracts; everywhere else the trees are mixed, and wherever the soil is favourable the beech rapidly drives out the birch. The latter loses its branches at the touch of the beech, and devotes all its strength to its upper part, where it towers above the beech. It may live long in this way, but it succumbs ultimately in the fight—of old age if of nothing else, for the life of the birch in Denmark is shorter than that of the beech. The writer believes that light is the cause of the superiority of the latter, for it has a greater development of its branches than the birch, which is more open, and thus allows the rays of the sun to pass through to the soil below, while the tufted, bushy top of the beech retains them, and thus preserves a deep shade at its base. Hardly any young plants can grow under the beech except its own shoots; and while the beech can flourish under the shade of the birch, the latter dies immediately under the beech. The birch has only been saved from total extermination by the facts that it had possession of the Danish forests long before the beech ever reached that country, and that certain districts are unfavourable to the growth of the latter. But wherever the soil has been enriched by the decomposition of the leaves of the birch the battle begins. The birch still flourishes on the borders of lakes and other marshy places, where its enemy cannot exist. In the same way in the forests of Zeeland the fir forests are disappearing before the beech. Left to themselves the firs are soon replaced by the beech. The struggle between the latter and the oak is longer and more stubborn, for the branches and foliage of the oak are thicker, and offer much resistance to the passage of light. The oak also has great longevity, but sooner or later it, too, succumbs, because it cannot develop in the shadow of the beech. The earliest forests of Denmark were mainly composed of aspens, with which the birch was apparently associated; gradually the soil was raised and the climate grew milder; then the fir grew and formed large forests. This tree ruled for centuries, and then ceded the first place to the holm oak, which is now giving way to the beech. Aspen, birch, fir, oak, and beech appear to be the steps in the struggle for the survival of the fittest among the forest trees of Denmark.

WE learn from *Science* that the U.S. Signal Service is about to undertake the publication of a general bibliography of meteorology and allied topics (such as earthquakes, terrestrial magnetism, and meteors), and requests from the writers of all countries a complete list of their contributions to the literature of these subjects, including the titles of all separate works, papers, and published observations. The number of titles already on hand is about 35,000. Especial attention is invited to the importance of full titles, with details of size, and place and date of publication. References to periodicals should be on this pattern:—

"Quetelet, Lambert Adolphe Jacques,
Sur les orages du mois d'Avril, 1865.
Bruxelles, *Acad. Sci. Bull.* XIX., 1865, 535-537."

Correspondence should be addressed to the Chief Signal Officer, U.S. Army, Washington.

ERMANNO LOESCHER of Turin has just issued the fifty-first catalogue of the literary treasures contained in his "Libreria Antiquaria." The present number is devoted chiefly to geography, travel, and antiquities, and the contents are conveniently arranged under four heads: America, Africa, China with Japan, Geography and Travels. Amongst the entries, which number 429 altogether, the bibliophile will find much to interest him.

HERR J. OLSEN, a Norwegian botanist, who has been studying the fungi in the vicinity of Bergen during the summer, has found a *Gomphidius gracilis* at Hovland. This variety has never before been found in Scandinavia, and belongs to England. Of other varieties new to Norway which he has discovered may be mentioned *Rhizopogon luteolus* and a *Boletus*. The flora of Tysnæs Island is stated to be identical with that of England.

THE following letter has been received by Prof. E. Ray Lankester, F.R.S., the Secretary of the Marine Biological Association, announcing a donation from the Royal Society in aid of the fund (now approaching 5000*l.*) which is being raised for the purpose of building and fitting a marine laboratory and experimental aquarium at Plymouth:—"Royal Society, Burlington House, London, W., Nov. 1, 1884. Sir,—Your letter relative to the Marine Biological Association was laid before the Council at their meeting on Thursday last, and I am directed to inform you that the Council have voted the sum of 250*l.* from the 'Donation Fund' in aid of the 'Marine Biological Association,' as a token of their sympathy with an effort which, they have every reason to believe, will contribute largely to the progress of biological science in this country.—I beg to remain, yours obediently, M. FOSTER, Sec.R.S."

AMONG other interesting papers in the *Proceedings* of the Perthshire Society of Natural Science for 1883-84 we notice: dimorphism in oak-gall makers and in their galls, by Prof. J. W. Trail, F.L.S.; evolution and some things said regarding it, by Rev. G. Milroy, D.D., in which a "creative" and "spontaneous" view of the origin of life is discussed with studied dispassionateness. We are glad to observe the flourishing state in which this Society seems to be.

PROF. DE LACOUPERIE is bringing to a conclusion a work on the aboriginal and non-Chinese races of China, which will be published shortly by Messrs. Field and Tuer. It will deal with one section of the learned author's researches into the *origines Sinicæ*, in which he has been engaged for several years, and which have been so successful in some important respects. One of the most curious results of the work will be to demonstrate the real youth of the Chinese as a homogeneous and powerful people. It is based wholly on original researches into Chinese literature, and this is, we believe, the first time that the ethnology of early China has been studied from the works of the Chinese themselves, or indeed at all. The work deals with the various tribes which have successively occupied China proper, and which are intimately connected with the Indo-Chinese races, the latter being in fact the modern representatives of the early occupants of China. The originality of the subject, as well as of the sources from which it is treated, should render the volume one of great scientific and general interest. The work was originally prepared as an introduction to Mr. Colquhoun's new book "Among the Shans," but it gradually grew to such an extent under its author's hands that it became too large for such a purpose, and this, as well as its independent value, rendered it desirable to have a separate publication. Mr. Colquhoun's volume, which is on the point of publication, will, however, contain an introduction by Prof. de Lacouperie on the cradle of the Shan race, which, curiously enough, he places far away on the borders of Shensi.

PROF. ENRICO CAPORALI continues to develop the scheme formulated in the first number of *La Nuova Scienza* with great vigour and learning. The third number, for the quarter ending September 1884, shows even greater energy and grasp of the subject than its predecessors. The editor's views are now quite clear—opposition alike to the two extremes of materialism and dogmatism, and the establishment of a new philosophy reconciling the subjective methods of the old schools with the objective standpoint of the new. Evolution in the Darwinian sense is accepted without reserve, and the germs of life are sought in the very lowest forms of matter—the crystal, the molecule, and the atom itself. Thus evolution receives its broadest expression, and begins from the very first as well for the vital force as for crude matter itself. The first genesis of psychis is in fact referred to a unity arising out of the fusion of lower chemical species in a higher chemical species, which forms the connecting link between *chemical* and biological psychogenesis. In it individuals begin to react in such a way that the opposition between subject and object may almost be said to have already begun. The theory is ingenious and skilfully worked out; but the unusual interest taken on the Continent in this periodical is probably due mainly to the remarkable learning, clearness, and consistency with which the editor's views are advocated. In the present number the chief articles are: –Modern Italian Thought, the Pythagoric Formula of Cosmic Evolution, and the French Anti-Clerical Evolution.

A HIGH-LEVEL meteorological station has been recently established by Mr. Wragge on Mount Lofty, about 2200 feet high, and ten miles from Adelaide, South Australia. With Mr. Wragge's great energy and ability valuable results will doubtless be obtained from this new high-level station in connection with the excellent meteorological service of the colony.

IN the Report on Weights and Measures presented to Parliament by the Board of Trade, under the Weights and Measures Act, 1878, Sir T. H. Farrer remarks in reference to the metric system, that an opinion has been expressed by the Board of Trade that the time has now arrived when this country might with advantage join the International Convention on Metric Standards, under proper conditions; provided such a course is not to be taken as an adhesion, on the part of the United Kingdom, to the metric system. These observations appear to be intended as a reply to the eighth resolution of the Conference of the International Geodetical Association, held in Rome in October last, which expresses a hope that, if the rest of the world accepts the meridian of Greenwich for the unification of longitude, England will find in this agreement an additional motive for taking a new step in favour of the unification of weights and measures, by adhering to the Metrical Convention of May 20, 1875.

TWO years ago Prof. O. Sars, of Christiania, was given some mud taken from the bottom of a lake in Australia by Dr. Lumholtz, a Norwegian geologist. Recently he has made experiments with the same in small aquaria, and has succeeded in producing from the dried mud quite a fauna of Australian freshwater invertebrates.

ACCORDING to *L'Exploration*, Commander de Amezaga, of the Italian navy, has handed to the Ministry of Marine at Rome the collections made during the recent voyage of the corvette *Carracciolo*. The voyage lasted more than two years and a half, during which time she touched at Montevideo, Valparaiso, Callao, Guayaquil, Sydney, Singapore, and Aden. Important hydrographical investigations were made in the Straits of Magellan and on the coasts of Fiji, Tahiti, and among the islands of the South Pacific. The collections relate principally to anthropology, ethnology, the fauna and flora of Peru and Australia, Peruvian pottery, mineralogy, and zoology. In the Anthropological Section there are three Peruvian mummies in perfect preservation, although they probably date back a thousand years before the Spanish Conquest. They are distinguished from the Egyptian mummies by being in a crouching position instead of at full length. In the Ethnological Section there is a curious specimen of Carib art found at the summit of Mont Cristi, near Guayaquil.

THE *Times* announces the death of the celebrated naturalist and traveller, Dr. Alfred Brehm, in his fifty-fifth year. The son of a Thuringian ornithologist, he devoted much of his own attention to the study of birds, but all animal nature was his province, and his observations and researches are recorded in volumes of high importance and value. While still a very young man he spent several years in the north-east districts of Africa, and later in life undertook frequent scientific tours in distant lands, including a visit to Siberia and Turkestan. In 1862 he accompanied the Duke of Coburg-Gotha to Abyssinia, and in 1877 acted as scientific guide to Prince Rudolph in the country of the Danube. The deceased was for some years Director of the Zoological Gardens at Hamburg.

A MAGNIFICENT meteor was observed at Mülheim, on the Rhine, on the evening of October 30 last. Its direction was from north-east to south-west, its duration two to three seconds. While visible its progress was accompanied by a hissing sound, and it finally exploded with a loud report and brilliant blue-reddish light, leaving a bright trail behind which was still visible half a minute later.

TWO prehistoric tombs have been recently opened near the villages of Latdorf and Gröna near Bernburg (Germany), under the direction of Prof. Virchow. Three skeletons, an urn, a comb, a bronze ring, a flint knife, and half a horseshoe were found. The excavations have now been continued under Dr. Fischer's direction, and more objects brought to light, among others curious necklaces made of the teeth of bears, wolves, and foxes. The age of the tombs is said to be over 3000 years. The objects found will be preserved in the museum of the Bernburg Antiquarian Society.

WE have received from Mr. Henry Simon, of Manchester, a copy of a pamphlet by Mr. Breckon, Mr. Simon's representative for the Cleveland district, on the question of the manufacture of metallurgical coke in connection with the saving of the by-products. An account of the present position of the question in England is added, as well as a reprint of papers on the subject read by Mr. Simon, Mr. Dixon, and Mr. Smith before the Iron and Steel Institute and the British Association.

THE tobacco plantations of Southern Hungary are threatened by a terrible pest, viz. the so-called wire-worm, which differs from the ordinary tobacco-worm, inasmuch as it enters the stem of the plant just above the root and then works its destructive way right up to the flowers. Plants thus attacked yield no tobacco whatever, as the leaves turn yellow and fall shortly after the worm has attacked the stem. The tobacco-worm merely attacks the root. The large plantations of Maslak, which are celebrated for their excellent produce, have been nearly all destroyed this year by the wire-worm, while in other districts the tobacco-worm has done much damage.

A LARGE Horticultural Exhibition is to be held at Berlin in September 1885.

A COFFEE plantation has been established by a landowner in the neighbourhood of Rome. It is stated that he realised a fair profit with this year's harvest, which consisted of 2 tons of coffee per hectare.

A NEW mud-crater has formed at the foot of Mount Etna, measuring some 500 metres in diameter. The mud ejected by it flows towards Monte Furmento and the pine forest of Biancavilla.

THE additions to the Zoological Society's Gardens during the past week include a Vervet Monkey (*Cercopithecus lalandii* ♀) from South Africa, presented by Mr. J. A. Cameron; an Asiatic Wild Ass (*Equus onager* ♂) from South-Western Asia, presented by Lieut.-Col. R. A. Crawford; a Short-eared Owl (*Asio brachyotus*), a Lesser Kestrel (*Tinnunculus cenchris*) from Griqualand West, South Africa, presented by Mrs. L. Weil; a Common Cormorant (*Phalacrocorax carbo*), British, presented by Mr. S. S. Mossop; a Macaque Monkey (*Macacus cynomolgus*) from India, deposited; two Tasmanian Wolves (*Thylacinus cynocephalus*) from Tasmania, a Reindeer (*Rangifer tarandus* ♂) from Labrador, a Golden-winged Woodpecker (*Colaptes auratus*) from North America, a South American Rat Snake (*Spilotes variabilis*) from South America, purchased.

OUR ASTRONOMICAL COLUMN

THE SATURNIAN SYSTEM.—Dr. W. Meyer, late Assistant Astronomer at the Observatory of Geneva, has published in t. xxix. of *Mémoires de la Société de Physique et d'Histoire Naturelle de Genève* a determination of the dimensions of Saturn's rings and of the orbits of six satellites, and the mass of the planet, founded upon observations made at the Observatory, with a filar-micrometer on the Merz refractor of 10 inches aperture, presented to that institution by the late Prof. Plantamour. The observations in question were made during the opposition of 1881, and upon a system which it was believed would give the measures a superiority over those obtained with the same instrument in the previous year. The memoir on Saturn and his satellites, which has been separately published, is preceded by a very minute description of the Plantamour equatorial by Prof. Thury. The measures are printed in detail with the elements of reduction employed; they extend from August 15 to December 19. Dr. Meyer considers that Mimas was certainly observed on five nights, though he remarks: "Même dans la colossale lunette de Vienne, c'est un objet très délicat, qui est rarement visible quand il n'est pas près d'une élongation." On November 4, at 10h. 31m., a very faint object was observed, approximately in the position—$x = 254''$, $y = -35''$, which, by means of Prof. Asaph Hall's ephemeris, Dr. Meyer identifies as Hyperion. In the discussion of the orbits of the satellites (Enceladus, Tethys, Dione, Rhea, Titan, and Japetus) provisional elements are assumed, and are corrected in the usual manner by equations of condition. In order to determine the mean motions, the Geneva results are compared with those of Bessel in the case of Titan, while for other satellites the comparison is made with the epochs deduced by Jacob from his measures at Madras in the years 1856-58, it being considered that, in view of the precision attaching to them, little would be gained by having recourse to the older observations, especially as difficulties attend their explanation in many cases.

The mass of the ring is concluded to be very minute, certainly very much less than the value assigned by Bessel; it is stated that with the aid of Tisserand's theory, taken in connection with the results of observation, $\frac{1}{1647}$ was found for a higher limit. The most probable mass of the planet deducible from the Geneva observations is $\frac{1}{3482\cdot5}$, agreeing within the probable error with that assigned by Jacob, and that derived by Prof. Asaph Hall from the Washington measures of Japetus.

The following are the periods of the satellites and their mean distances from Saturn, determined by Dr. Meyer:—

	Sidereal revolution				Mean distance	
	d.	h.	m.	s.	In arc ″	In equatorial radii of Saturn
Enceladus	1	8	53	6·92 ...	34·350 ...	3·866
Tethys ...	1	21	18	25·62 ..	42·751 ...	4·812
Dione	2	17	41	9·29 ...	54·757 ...	6·163
Rhea	4	12	25	11·57 ...	76·484 ...	8·608
Titan	15	22	41	23·16 ...	176·910 ...	19·911
Japetus ...	79	7	49	24·84 ...	514·711 ...	57·930

THE VARIABLE STAR U GEMINORUM.—Mr. Knott has succeeded in observing another maximum of this irregular variable, which appears to have taken place on October 22, though there was very little change for four days after that date. On October 18 it was below 13·3 m. From his previous observations compared with this one, Mr. Knott infers that there has been a double period in 160 days.

ENCKE'S COMET.—M. Otto Struve has notified that an ephemeris of this comet, extending from the beginning of the present month to the beginning of May next, has been prepared by Dr. Backlund, and that it was intended to communicate it to astronomers direct from Pulkowa.

WOLF'S COMET.—M. Gonnessiat, of the Observatory at Lyons, has calculated elements of this comet from observations extending over forty-five days: he finds the period of revolution 6·862 years. The following ephemeris is deduced from his orbit:—

At Paris Midnight

		R.A.			N.P.D.		Log. distance from Earth	Intensity of light
		h.	m.	s.	°	′		
November	21...	22	57	13 ...	93	6·0 ...	0·0035 ...	0·74
	23...	23	2	11 ...	93	31·4		
	25...	23	7	11 ...	93	54·9 ...	0·0169 ...	0·70
	27...	23	12	13 ...	94	16·4		
	29...	23	17	18 ...	94	36·0 ...	0·0300 ...	0·65
December	1...	23	22	23 ...	94	53·8		
	3...	23	27	30 ...	95	9·8 ...	0·0425 ...	0·61

The intensity of light on September 21 is taken as unity.

GEOGRAPHICAL NOTES

AT the last meeting of the French Geographical Society Dr. Paul Heis read a paper upon the results of his journey through the valley of the Meikong, and further north into the unexplored region which separates Indo-China, properly so-called, from Tonquin. Dr. Heis has made several discoveries likely to be of service to anthropologists, geologists, and mineralogists, and has brought back with him a collection of insects and reptiles, as well as a meteorological register, which was checked four times a day during the whole of his journey. Leaving Saigon on December 12, 1882, he ascended the Meikong as far as the 18th parallel, at which point he turned off from the main stream in order to go up its affluent, the Nancham, and endeavoured to reach Luang-Prabang through the hitherto unexplored region known in Annam as the principality of Tranninh. This region is infested by Chinese brigands, called Hos, who drove him back to the Meikong, and seized the greater part of his baggage. Reascending the river to Luang-Prabang he remained there for eight months, exploring the country in various directions, notably along the Nancham, which took him close to the region of the Hos, so that he was again compelled to retrace his steps. Being prevented from returning eastward, he went through the Siamese part of Burmah, reascended the Meikong as far as Chieng-sen, thence, passing from the basin of the Meikong to that of the Meinam, he reached Chieng-mai, and so made his way on foot to Bangkok, following the course of the Meinam. From Bangkok he went to Chantalun, on the west coast of Siam, and thence on foot to Baltambang, traversing the plain of the Saphyrs, where 4000 Burmese are employed in the search for precious stones. After visiting the ruins of Angkor, he reached Saigon on June 12 last.

THE oldest Geographical Society in Europe has hitherto been regarded as that of Paris, founded in 1821, but according to a paper recently read before the Verein für Erdkunde at Dresden by Dr. Ruge, this honour belongs to the "Cosmographic Society" of Nuremberg. It was established about 1740, and first came before the public in 1746, and was connected with Homann's establishment in Nuremberg. The founder of the latter was the well-known cartographer, Johann Homann, on